AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.   (Original): An IP router including an IP(Internet Protocol) routing table which stores routing information for connecting a plurality of client devices with an original server which is at least an origin of supplying a content and with a plurality of mirror servers into which the content supplied from the original server is copied, the IP router comprising:

means for ending a connection relating to a packet output from a specific port of the client device and obtaining request information of a content requested by the client device;

means for selecting an optimum server for the request information based on information which is to be an index for selecting an optimum server if the obtained request information corresponds to the plurality of mirror servers, and based on the routing information;

means for obtaining the content by connecting with the optimum server selected; and

means for transferring the obtained content to the client device.

2.   (previously presented): The IP router, as claimed in claim 1, further comprising:

means for detecting a change in contents of the IP routing table;

means for detecting a change in a network topology based on the detected change in the contents of the IP routing table;

means for altering a selection criteria of the optimum server based on a result of detecting that the network topology has been changed; and

means for altering a band setting for each service class corresponding to a traffic change.

3.   (previously presented): The IP router, as claimed in claim 1, wherein the information to be an index for selecting the optimum server comprises at least one of:

information for driving/stopping state per server,

Round-Trip Time (RTT) information, or

throughput information.

4.   (Original): The IP router, as claimed in claim 1, wherein the means for selecting an optimum server selects the optimum server by additionally considering a past access track record.

5.   (previously presented): The IP router, as claimed in claim 1, further comprising:
means for detecting a change in the IP routing table and performing a health check for obtaining the index information per server based on the detected change in the IP routing table.

6.   (previously presented): The IP router, as claimed in claim 2, further comprising:
means for monitoring a changing situation of the traffic for a predetermined period of time, which monitoring means is triggered by the detected topology change, wherein the means for altering the band setting alters the band setting for each service class by using a result of monitoring the changing situation of the traffic.

7.   (previously presented): A communication system comprising:
a plurality of client devices;
an original server which at least serves as an origin of supplying a content;
a plurality of mirror servers which mirror servers copy and hold the content supplied from the original server; and
an Internet Protocol (IP) router coupled to the client devices via a client side interface, which IP router connects client devices with the original server and the mirror servers via a network, wherein the IP router includes:
an Internet Protocol (IP) routing table which stores routing information;
means for ending a connection relating to a packet output from a specific port of the client device and obtaining request information of a content requested by the client device;
means for identifying the mirror servers comprising the content requested based on the obtained request information and selecting an optimum server for the request information based on an index information which is to be an index for selecting an optimum server, and based on the routing information;

means for obtaining the content by connecting with the optimum server selected; and

means for transferring the obtained content to the client device.

8.   (previously presented):   The communication system, as claimed in claim 7, wherein the IP router further comprises:

means for detecting a change in contents of the IP routing table;

means for detecting a change in a network topology based on the detected change in contents of the IP routing table;

means for altering a selection criteria of the optimum server based on a result of detecting that the network topology has been changed; and

means for altering a band setting for each service class according to a traffic change.

9.   (previously presented): The communication system, as claimed in claim 7, wherein the index information comprises at least one of:

information for driving/stopping state per server,

Round-Trip Time (RTT) information, or

throughput information.

10.   (Original): A communication system, as claimed in claim 7, wherein the means for selecting an optimum server selects the optimum server by additionally considering a historical access track record.

11.   (previously presented): The communication system, as claimed in claim 7, wherein the IP router further comprises:

means for detecting a change in the IP routing table and performing a health check for obtaining the index information per server based on the detected change in the IP routing table.

12.   (previously presented): The communication system, as claimed in claim 8, wherein the IP router further comprises:

means for monitoring a changing situation of the traffic for a predetermined period of time, wherein the means for altering the band setting alters the band setting for each service class according to a result of monitoring the changing situation of the traffic.

13.   (Original): A band setting method of an IP router for setting a band when connecting a plurality of client devices with an original server which at least serves as an origin of supplying a content and with a plurality of mirror servers which copy and hold the content over a network based on routing information of a routing table provided in an IP(Internet Protocol) router, the band setting method comprising the steps of:

ending a connection relating to a packet output from a specific port of the client device, and obtaining request information of a content requested by the client device;

selecting an optimum server for the request information based on information which is to be an index for selecting an optimum server if the obtained request information corresponds to the plurality of mirror servers, and based on the routing information;

obtaining the content by connecting with the optimum server selected;

transferring the obtained content to the client device;

detecting, from a change in contents of the IP routing table, that a network topology has been changed;

altering a selection criteria of the optimum server based on a result of detecting that the network topology has been changed; and

altering a band setting for each service class according to a traffic change accompanying an alteration of the selection criteria.

14.   (previously presented): The band setting method, as claimed in claim 13, wherein the information to be an index for selecting an optimum server comprises at least one of:

information for driving/stopping state per server,

Round-Trip Time (RTT) information, or

throughput information.

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15.   (previously presented): The band setting method, as claimed in claim 13, wherein selecting an optimum server comprises:

selecting the optimum server by additionally considering a historical access track record.

16.   (previously presented): The band setting method, as claimed in claim 13, wherein a health check for obtaining information per server, which is to be an index for selecting the optimum server, is performed when a change in the IP routing table is recognized.

17.   (previously presented): The band setting method, as claimed in claim 13, further comprising:

monitoring a changing situation of the traffic for a predetermined period of time, and

altering the band setting for each service class according to a result of monitoring the changing situation of the traffic.

18.   (currently amended): A ~~computer-readable~~ tangible recording medium ~~holding~~ storing software program for setting a band by an Internet Protocol (IP) router which sets a band when connecting a plurality of client devices with an original server which is at least an origin of supplying a content and with a plurality of mirror servers which copy and hold the content over a network based on routing information of a routing table provided in the IP router, which software program when executed by a computer of the IP router causes the computer to perform operations comprising a method of:

ending a connection relating to a packet output from a specific port of the client device, and obtaining request information of a content requested by the client device;

selecting an optimum server for the request information based on information which is to be an index for selecting an optimum server if the obtained request information corresponds to the plurality of mirror servers, and based on the routing information;

obtaining the content by connecting with the selected optimum server; and

transferring the obtained content to the client device.

19.   (previously presented): The medium, as claimed in claim 18, wherein the method further comprises:

detecting, from a change in contents of the IP routing table, that a network topology has been changed;

altering a selection criteria of the optimum server based on a result of detecting that the network topology has been changed; and

altering a band setting for each service class according to a traffic change

20.   (previously presented): A method comprising at least one of downloading software to a computer, which when executed by the computer causes the computer to perform operations comprising the method of claim 13, or providing software to download to a computer, which when executed by the computer causes the computer to perform operations comprising the method of claim 13.